

Notice of Allowability	Application No.	Applicant(s)	
	10/056,890	NEET, KIRK E.	
	Examiner	Art Unit	
	Tran N. Nguyen	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☐ The allowed claim(s) is/are _____.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____. |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____. | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____. |

Tran N. Nguyen
Primary Examiner
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Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

(I) **Claims 1-10** are drawn to stator structure classified in class 310, subclass 254.

(II) **Claims 11-21** are drawn to method of making a stator, classified in class 29, subclass 596.

Applicant's election, without traverse, of claims 1-10, on 7/28/03, is acknowledged. Therefore, the election/restriction is made FINAL.

Examiner's Amendment

1. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicants, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it must be submitted no later than the payment of the Issue Fee.

Please change the claims as follow:

Cancel claims 11-21 (which is a non-elected invention. See Election/Restriction section above)

In claim 1:

Replace Claim 1 as follow:

A stator core assembly for an alternator ~~of the type~~ having a rotor assembly which presents a rotating, alternating polarity magnetic field, the stator core assembly ~~of the type~~ having an annular core defining an outside diameter, an inside diameter, and a plurality of radially projecting winding slots opening to the inside diameter but terminating short of the outside diameter, the core further defining a lead side and an opposite non-lead side, the stator core assembly further comprising:

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(a) at least two electrical conductors designated as conductor A and conductor B,

(b) the conductors positioned into the winding slots where:

n = number of phases of the stator core assembly,

m = number of the winding slots in the stator core,

with the winding slots numbered 1 through m ,

L = number of layers of the conductors A and B in the winding slots, wherein a pair of the conductors A and B define one layer, ~~by the following winding steps~~
said one layer comprising:

(c) a first lead of conductor A is placed into ~~the~~ a slot number 1 with the conductor A first lead extending from the stator lead side end,

(d) a first lead of the conductor B is placed into slot number $n+1$ with the conductor B first lead extending from the stator lead side end,

(e) the conductor A is placed into the slot number $n+1$ thereby forming an end loop on the non-lead side end and lying in the slot number $n+1$ radially shifted inwardly from the conductor B,

wherein the pair of the conductors A and B lying in the same slot define a layer L ,

(f) the conductor A is placed into ~~the~~ a slot number $2n+1$ thereby forming an end loop on the lead side,

(g) the conductor B is shifted into the slot number $2n+1$ thereby forming an end loop on the non-lead side and lying in the slot number $2n+1$ radially shifted inwardly from the conductor A; ~~wherein h) the conductors A and B positioned as recited herein the preceding section (a) though (g) as provided in the preceding c) through g) for all the slots numbered through $m+1-n$, thereby forming a first layer L ,~~
and

(i) the conductor A extending from the slot number $m+1-n$ on the lead side end thereby defining a conductor A second lead, and the conductor B extending from the slot number 1 thereby defining a conductor B second lead.

In claim 6, change " $N \geq 1$ "

to **—said number of phases of the stator core assembly, $n \geq 1$ —**

In claim 7, change " $N = 6$ "

to **—said number of phases of the stator core assembly, $n = 6$ —**

The above amendment is authorized by Mr. Thompson, attorney of record on Oct 21, 2003.

Allowable Subject Matter

Claims 1-10 are allowed.

Reason for Allowability

The following is an examiner's statement of reasons for allowance: the primary reason for the allowance is the including, in combination with other limitations recited in the claims, the limitations of a stator assembly having winding comprising:

(a) at least two electrical conductors designated as conductor A and conductor B,

(b) the conductors positioned into the winding slots where:

n = number of phases of the stator core assembly,

m = number of the winding slots in the stator core,

with the winding slots numbered 1 through m ,

L = number of layers of the conductors A and B in the winding slots, wherein a pair of the conductors A and B define one layer, said one layer comprising:

(c) a first lead of conductor A is placed into a slot number 1 with the conductor A first lead extending from the stator lead side end,

(d) a first lead of the conductor B is placed into slot number $n+1$ with the conductor B first lead extending from the stator lead side end,

(e) the conductor A is placed into the slot number $n+1$ thereby forming an end loop on the non-lead side end and lying in the slot number $n+1$ radially shifted inwardly from the conductor B,

wherein the pair of the conductors A and B lying in the same slot define a layer L,

(f) the conductor A is placed into a slot number $2n+1$ thereby forming an end loop on the lead side,

(g) the conductor B is shifted into the slot number $2n+1$ thereby forming an end loop on the non-lead side and lying in the slot number $2n+1$ radially shifted inwardly from the conductor A; the conductors A and B positioned as recited herein the preceding section

(a) through (g) for all the slots numbered through $m+1-n$, thereby forming a first layer L, and

(i) the conductor A extending from the slot number $m+1-n$ on the lead side end thereby defining a conductor A second lead, and the conductor B extending from the slot number 1 thereby defining a conductor B second lead.

Comparing to the prior-art of the record, none of the prior art references of the record, either stand alone or in combination, has taught or suggest the above-mentioned features in combination with other limitations recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran Nguyen whose telephone number is (703) 308-1639.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956. The fax phone number for this Group is (703) 305-3431 (32).

A handwritten signature in black ink, appearing to read 'Tran Nguyen', with a long horizontal flourish extending to the right. Below the signature, the name 'TRAN NGUYEN' is printed in a small, sans-serif font.

PRIMARY PATENT EXAMINER

TC-2800